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(54) Auxiliary lenses for eyeglasses

(57) An eyeglass device includes a spectacle frame (10) having two legs (11) pivotally coupled to two side extensions (21) and having two magnetic members (14) secured in the rear and side portions. The auxiliary frame (20) includes two legs (11) engaged on the spectacle frame (10) and each having a magnetic mem-

ber (22) for engaging with the magnetic members (14) of the spectacle frame (10) so as to secure the spectacle frames (10, 20) together and so as to prevent the auxiliary frame (20) from moving downward relative to the spectacle frame (10).

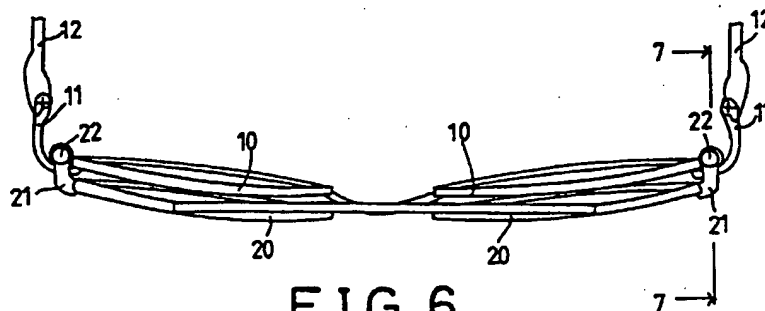


FIG. 6

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Description

The invention relates to auxiliary lenses for attaching to the eyeglasses.

Typical spectacle frames include a magnetic material secured to the peripheral portion or the side portion for attaching an auxiliary frame to the spectacle frame. The auxiliary frame includes a magnetic strip for engaging with the magnetic material of the spectacle frame. However, the auxiliary frame may be easily disengaged from the frames when the users are jumping. In addition, the magnetic materials are embedded in the frames such that the frames should be excavated with cavities for engaging with the magnetic members and such that the frames are weakened.

The invention is to provide an auxiliary frame which may be stably engaged on the frames.

FIGS. 1 and 2 are front views of a spectacle frame and of an auxiliary frame respectively;
FIGS. 3 and 4 are top views of the spectacle frame and the auxiliary frame respectively;
FIG. 5 is a front view of the frame combination;
FIG. 6 is a top view of the frame combination; and
FIG. 7 is a cross sectional view taken along lines 7-7 of FIG. 6.

In FIGS. 1 to 4, an eyeglass device comprises a spectacle frame 10 and an auxiliary frame 20 for supporting lenses. The spectacle frame 10 includes two extensions 11 extended from the side portions for pivotally coupling two legs 12. The spectacle frame 10 includes two projections 13 secured to the side portions for supporting magnetic members 14. The auxiliary frame 20 includes two side portions each having an arm 21 engaged with the upper portion of the spectacle frame 10 (FIGS. 5 and 6). The auxiliary frame 20 includes two magnetic members 22 secured to the arms 21 for engaging with the magnetic members 14 such that the auxiliary frame 20 may be stably supported on the spectacle frame 10, best shown in FIGS. 5 and 6.

The arms 21 are engaged on the spectacle frame 10 for stably supporting the auxiliary frame 20 on the spectacle frame 10. The auxiliary frame 20 will not move downward relative to the spectacle frame and will not be easily disengaged from the spectacle frame when the users are jumping. The magnetic members 14, 22 are not embedded in the frames 10, 20 such that the strength of the frames 10, 20 will not be decreased.

In FIG. 7, the projections 13 and the magnetic members 14 are located lower than the upper portion of the spectacle frame 10; and the end portions of the arms 21 and/or the magnetic members 22 extend downward toward the projections 13 such that the arms 21 and the magnetic members 22 may hook on the spectacle frame 10 and such that the auxiliary frame 20 may further be stably supported and secured to the spectacle frame 10.

Claims

1. An eyeglass device comprising a spectacle frame (10) and an auxiliary frame (20) for supporting lenses, the spectacle frame (10) including two side portions each having an extension (11) for pivotally coupling a leg (12), characterized in that:
the spectacle frame (10) includes two projections (13) secured to two rear and side portions for supporting two first magnetic members (14), the auxiliary frame (20) includes two arms (21) for engaging on the spectacle frame (10) and for supporting two second magnetic members (22) and for engaging with the first magnetic members (14), the arms (21) prevent the auxiliary frame (20) from moving downward relative to the spectacle frame (10).
2. An eyeglass device of claim 1, wherein the projections (13) and the first magnetic members (14) are arranged lower than an upper portion of the spectacle frame (10), the second magnetic members (22) are extended downward for hooking on the spectacle frame (10) so as to further secure the auxiliary frame (20) to the spectacle frame (10).



FIG. 1

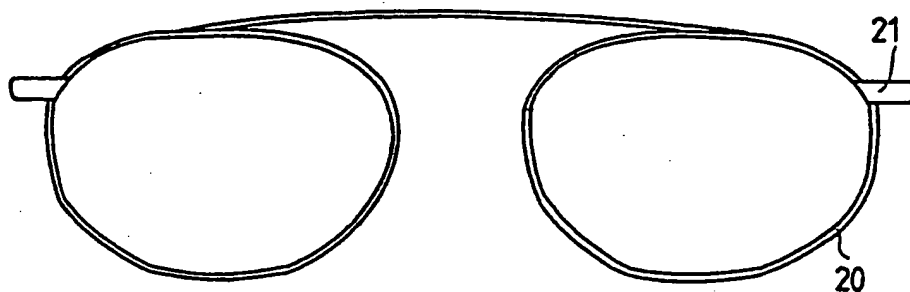


FIG. 2

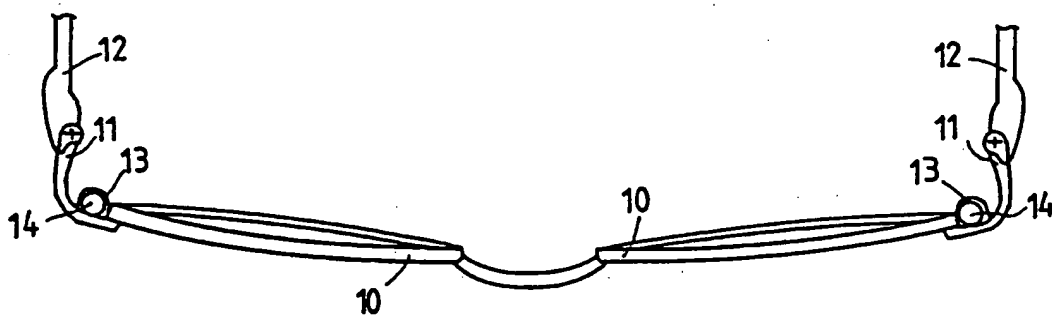


FIG. 3



FIG. 4

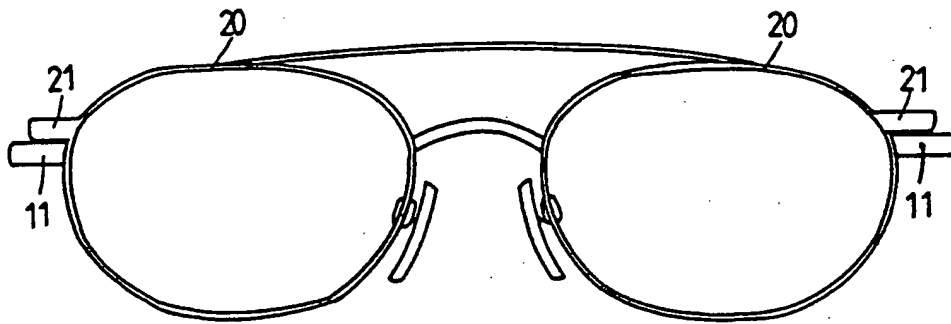


FIG. 5

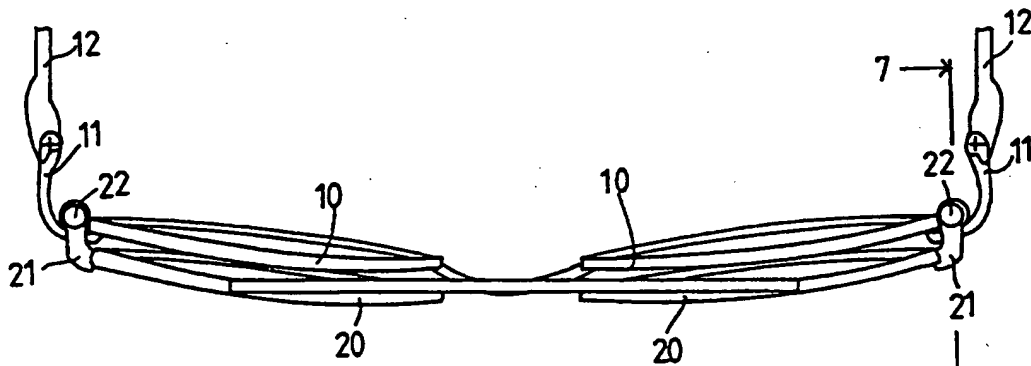


FIG. 6

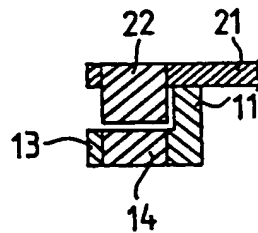


FIG. 7



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EUROPEAN SEARCH REPORT

Application Number
EP 96 11 2789

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	DE 43 16 698 A (KARP LEILA) 17 November 1994 * the whole document *	1,2	G02C9/00
A	US 5 416 537 A (SADLER FRANK) 16 May 1995 * abstract *	1,2	
A	PATENT ABSTRACTS OF JAPAN vol. 95, no. 005 & JP 07 128620 A (SAN RIIBU:KK), 19 May 1995, * abstract *	1,2	
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A	DE 88 06 898 U (E. ZEN) 15 September 1988 * claims *	1	
A	WO 90 09611 A (STEMME OTTO) 23 August 1990 * abstract *	1	
A	DE 17 97 366 A (B. WIEDEMANN) -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G02C
Place of search	Date of completion of the search	Examiner	
THE HAGUE	22 January 1997	CALLEWAERT, H	
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